

REPORT DOCUMENTATION PAGE

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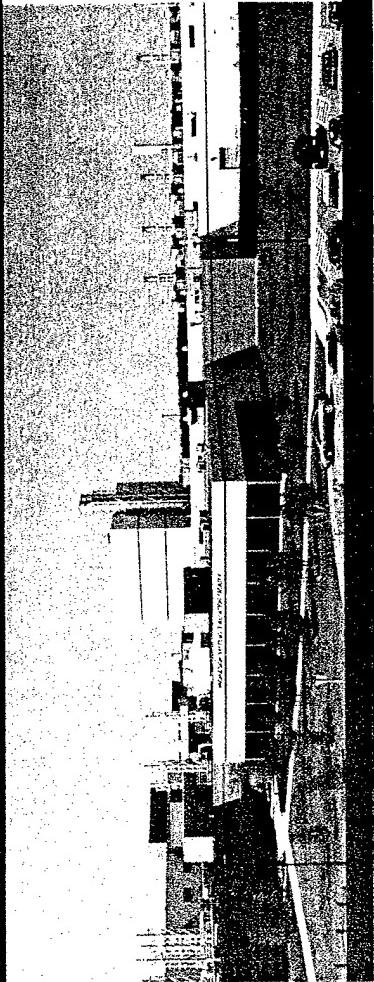
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~~DATA QUALITY ENGINEERING~~

Propulsion Systems Evaluation Facility

PATUXENT RIVER, MARYLAND



- 55 Test Facilities
- 125 Engineering/Technical Specialists
- Full Range Propulsion Systems Test & Evaluation

FUELS & LUBRICANTS

Rotor Spin Facility
Engine Outdoor Test Sites
Fuels & Lubricants Performance Lab

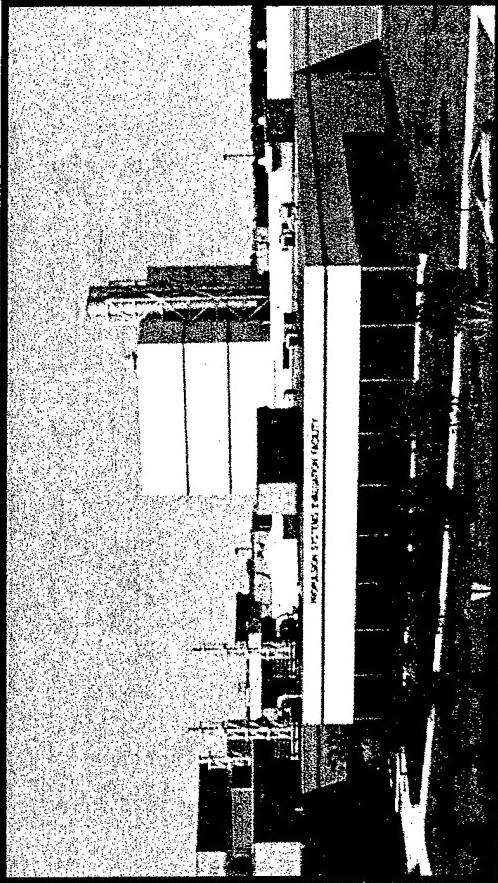
SECONDARY POWER

Gyroscopic Test Stand
Variable Attitude Test Stand
Helicopter Drive System Test Facility
Engine Fuel Control System Test

AIRCRAFT ENGINES

Secondary Power Systems
Fuels & Lubricants Chemistry Lab

DRIVE SYSTEMS



Propulsion Systems Evaluation Facility

Naval Air Warfare Center Aircraft Division
Propulsion Systems Evaluation Facility (PSEF)
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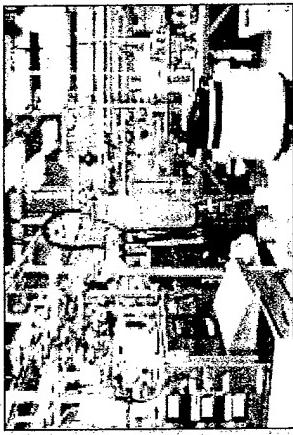
NAVAL AVIATION SYSTEMS
TEAM

FUELS & LUBRICANTS LABORATORY

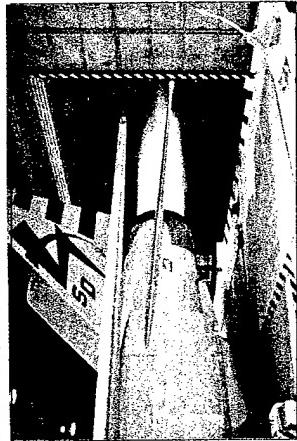
FUELS & LUBRICANTS TEST AREA



OUTDOOR TEST SITE
LAKEHURST, NJ

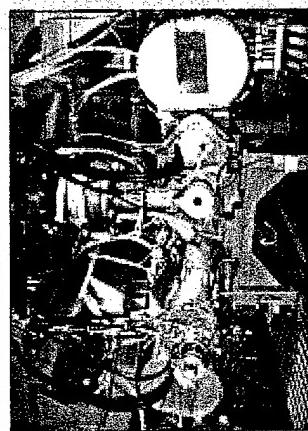


AIRCRAFT TEST &
EVALUATION FACILITY



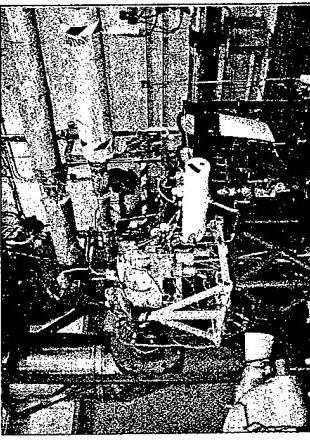
- Vapor Pressure
- Density & Acidity
- Surface Tension
- Foaming Tendency
- Chemical Stability
- Chemical Constituents
- Viscosity
- Distillation
- Flash Point
- Pour Point
- Heating Value

HELICOPTER TRANSMISSION TEST



- 8000 Horsepower
- Main & Tail Rotor Loading
- 700 Data Channels
- Main Transmission Thrust
- Accessory Loading

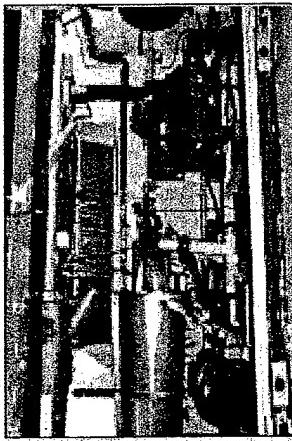
ACCESSORY TEST AREA



- Starters & Control Valves to 600 HP
- 3pps., 400psig., 1200°F Air Supply
- 2500°F Burner Rig
- T63 Engine Test Facility
- Auxiliary Power Units

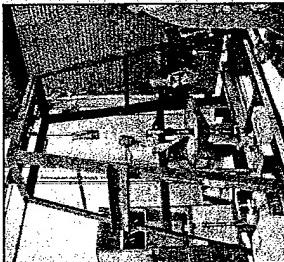
- Fuel & Lubricant Specification
- Performance Evaluations
- Filter & Coalescer Performance
- High Temp Lube Characteristics

UNMANNED AIR VEHICLE ALTITUDE TEST CELL

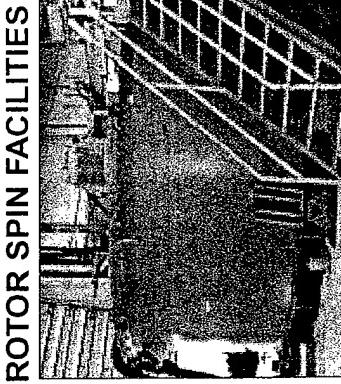
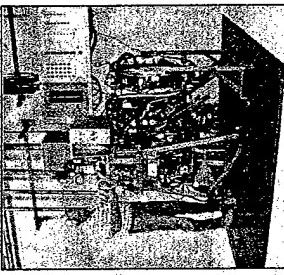


- Outdoor Thrust Runs
 - Gyroscopic Test Loads
 - Altitude, Pitch & Roll
 - Thrust Engine Correlation
- 0 - 25,000 Ft Altitudes
 - -25°F to 125°F Air Temperature
 - -80°F & 140°F Soaks
 - 530 Data Channels
 - Dynometers up to 3000 HP

FUEL COMPONENT TEST



- Spin Testing of Turbines & Compressors
- 4 Chambers
- 110 in. Dia. Max
- 150,000 RPM
- Heated
- Evacuated
- 24 Hr. Ops



ROTOR SPIN FACILITIES

- Aircraft High Power
- Noise Attenuation Facility
- Night Vision
- Weight & Balance
- Thrust Measurement
- Wind, Rain & Heat
- T&E & Maintenance Support